

The rejection factor gets worse, e.g. $R \sim 100$ or even less under the higher background rate circumstances at $\sqrt{s} = 500$ GeV collision. The resulting trigger upgrade introduces tracking and timing information to a new set of muon trigger processors to compensate and reinforce the rejection power. The observed rejection factors are summarized in Table. for various options of the new momentum sensitive trigger. The rejection factors evaluated so far are not yet included additional timing/spacial constraints by RPCs which will be discussed next.

Table 1: Rejection factors of the new momentum sensitive muon trigger observed in Run9 $\sqrt{s} = 500$ GeV operation. $\Delta strip = 1$ corresponds to about 1cm sagitta of the trajectory in the MuTr volume. Larger $\Delta strip$ accommodates larger curvature of the trajectory, thus the momentum threshold becomes lower and the rejection factor becomes smaller. The clustering algorithm of hit patterns was introduced to gain higher rejection power, however it could sacrifice the trigger efficiency of true high momentum track and therefore further study is required to employ.

$\Delta strip$	0	1	2
w/o clustering	20	13	9
w/ clustering	86	24	15